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APR 2 0 2004

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

201 APR 23 PM

A MADEMAIn re Patent Application of

H. SATO et al

Serial No. 10/608,011

Filed: June 30, 2003

For: OPTOELECTRONIC WAVEGUIDING DEVICE, STRUCTURAL BODY INCLUDING THE SAME, AND OPTICAL MODULE

#### REQUEST FOR REFUND

Mail Stop 16
Director of the U.S.
Patent and Trademark Office
Alexandria, VA 22313-1450

Sir:

Applicants request a refund in the above-identified application due to an error on the part of the Patent Office.

On June 30, 2003, Applicants filed the new application in the above-identified application. Check No. 8776 in the amount of \$750.00 was included to cover the filing fee for the application. The application contained a total of eight claims, including three independent claims.

However, the Applicants' representative's Monthly Statement of Account for February 2004 (copy enclosed) indicates that an additional independent claims fee was charged to the deposit account on February 18, 2004, even though there were no additional independent claims filed. A copy of the mailroom date-stamped receipt, Check No. 8776 and the claims as filed is enclosed as evidence that the Patent

Serial No. 09/653,622

HIT 905-02PANCH

2004 APR 23 PM D: 04

Office had received the check noted above for the correct number of independent claims.

Please credit a refund in the amount of \$168.00 to the Deposit Account No. 50-1417.

Respectfully submitted,

of Shrinath Malur

Registration No. 34,663 Attorney for Applicant(s)

MATTINGLY, STANGER & MALUR, P.C. 1800 Diagonal Road, Suite 370 Alexandria, Virginia 22314 Telephone: (703) 684-1120 Date: April 20, 2004 PATENT AND TRADEMARK OFFICE 13-10-0001 07-01-2003 FOR CREDIT TO THE U.S. TREASURY

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1800 Diagonal Road, Ste. 370
Alexandria, VA 22314
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DATE

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Memo:

COMMISSIONER OF UNITED STATES

TO THE ORDER OF:

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2003 Jun 27,

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Mattingly, Stanger & Malur, P.C. 1800 Diagonal Road, Suite 370 Alexandria, Virginia 22314 (703) 684-1120

In re Patent Application of

H. SATO et al

Serial No.

Filed: June 30, 2003

For: OPTOELECTRONIC WAVEGUIDING DEVICE, STRUCTURAL BODY INCLUDING THE SAME, AND OPTICAL MODULE

#### Papers Filed Herewith:

- 1. Title Page; Specification (18 pp.), 8 Claims, Abstract; 2.
- Declaration and Power of Attorney; 3.
- Check #8776 for \$750.00 (Filing Fee); 4.
- 8 sheets drawings (Figs. 1-14); 5.
- Information Disclosure Statement, PTO-1449 Form, in duplicate; and copies of documents cited;
- List of Inventors' Names and Addresses; 6. Certified copy of JP 2002-247967; 7.
- 8. Transmittal; and
- Serial No. postcard. 9.

Receipt is hereby acknowledged of the papers filed, as identified in connection with the above-identified patent

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United States Patent and Trademark Office

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2011 APR 23 PM 3: 04



# **Deposit Account Statement**

Requested Statement Month: **Deposit Account Number:** 

February 2004

501417

Name:

Attention:

MATTINGLY STANGER & MALUR, P.C.

Address:

1800 DIAGONAL ROAD, SUITE 370

City:

**ALEXANDRIA** 

State:

VA

Zip:

22314

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## Martingly, Stanger & Malur, ...C.

JONN R. MATTINGLY DANIEL J. STANGER SHRINATH MALUR GENE W. STOCKMAN Of Counsel

JEFFREY M. KETCHUM Registered Patent Agent 4PR 2 0 2004

Bar Membership Other There Patents

X

#### ATTORNEYS AT LAW 1800 DIAGONAL ROAD, SUITE 370 ALEXANDRIA, VIRGINIA 22314

PATENT, TRADEMARK AND COPYRIGHT LAW FACSIMUE 17031-684-1167

2011 APR 23 PM 3: 04

(703) 684-1120

Date: June 30, 2003

Attorney Docket No. NIT-380

24956

To: Assistant Commissioner for Patents Washington, D.C. 20231

Sir: Transmitted herewith for filling is the patent application of:

Inventor: H. SATO et al (see attached)

For:
OPTOELECTRONIC WAVEGUIDING DEVICE, STRUCTURAL
BODY INCLUDING THE SAME, AND OPTICAL MODILIE

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Th	is application is		nout an execute	d Declaration.			
Pri file	ority is claimed ed August 2	Application No. 2002-247967					
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Exe	cuted Declaration	on.				,,	
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The Commissioner is hereby authorized to charge any additional fees that may be required to Deposit Account No. 50-1417.

Respectfully Submitted,

WHAT IS CLAIMED IS:

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- 1. A semiconductor optical device including an active region and an optical guide, comprising:
- a first electrode formed on a top surface of the semiconductor optical device, the top surface including a area above the active region or a surface of the optical guide; and
- a film located at an area at least above the active region and applied on a portion of the first electrode.
- 2. A semiconductor optical device according to claim 1, wherein said film is made of an electrically highly insulative material, metal oxide, a nitride or a silicide.
- 3. A mounting structure comprising a mounting plate for mounting the semiconductor optical device of claim 1, wherein:
- a portion of the first electrode of the semiconductor optical device, which is not coated with said film, is fixed to a second electrode formed on the mounting plate via solder; and

said film is in contact with the solder.

4. A mounting structure for mounting a semiconductor optical device including an active region and an optical guide, wherein:

the semiconductor optical device comprises:

a first electrode formed on a top surface of the semiconductor optical device, the top surface including a area above the active region or a surface of the optical guide; and

a film located at an area at least above the active region and applied on a portion of the first electrode; and

wherein a portion of the first electrode of the semiconductor optical device, which is distant from the active region, is fixed to a second electrode formed on a mounting plate via solder; and

said film is in contact with both said solder and said semiconductor optical device.

- 5. A mounting structure for a semiconductor optical device according to claim 4, wherein said film is provided at least at a position on a vertical line connecting the active region and the mounting plate.
- 6. A mounting structure for a semiconductor optical device according to claim 4, wherein said semiconductor optical device is a ridge type device, a buried type device or a vertical cavity surface emitting type device.
- 7. A semiconductor optical device mounting structure according to claim 4, wherein said film is made of an electrically highly insulative material, metal oxide, a nitride or a silicide.
  - 8. A non-hermetically packaged optical module in

which a mounting structure mounting a semiconductor optical 04 device is incorporated therein, wherein:

the semiconductor optical device comprises:

a first electrode formed on a top surface of the semiconductor optical device, the top surface including a area above the active region or a surface of the optical guide; and

a film located at an area at least above the active region and applied on a portion of the first electrode; and

wherein a portion of the first electrode of the semiconductor optical device, which is distant from the active region, is fixed to a second electrode formed on a mounting plate via solder; and

said film is in contact with both said solder and said semiconductor optical device.